l- predominating. These findings are in line with those of Neuberg and Luzzatto. It is evident, therefore, that in pentosuria the isomers may be mixed in varying proportions. The source of the pentose remains obscure. The nucleoproteids of the body cannot be excluded. Hunger or insufficient food causes a decrease in the excretion of the pentose. Like other observers, the author has found no relation between the glucose of the food and pentose excretion. The parallelism in the excretion of pentose and total nitrogen determined hourly is striking, and suggests an intimate relationship between the pentose and protein metabolism. Glucosamine, as shown by the results of administering it to the patients, does not increase the amount of pentose in the urine. Klercker was able neither to confirm nor refute Neuberg's observation regarding the possibility of formation of pentose from galactose. Following the administration of lactose, there was a sharp rise in the quantity of pentose in the urine, which did not, however, increase the total output beyond the theoretically possible limit.

On the Production of the so-called "Zellschollen" in Lymphatic Leukemia.—A. Spuler and A. Schittenhelm (*Deutsch. Arch. f. klin. Med.*, 1912, cix, 1) report their observations on a case of lymphatic leukemia. The so-called Gumprecht's shells or shadows which one sees in lymphatic leukemia, arise from lymphocytes with relatively pyknotic nuclei through bursting of the nucleus and mixture of the nuclear constituents with those of the cell protoplasm. The study of a fresh gland from a patient revealed similar pyknotic cells. From this material it was evident that the chromatin of the cells in addition to being diffusely distributed is also seen in clumps or plump strands. Germinal centres, such as are found in the normal lymphatic glands, were not encountered, but areas in which mitoses were numerous indicated that there was active proliferation of the cells. Phagocytosis of red blood cells was observed in the lymphatic glands. A gradual transition of these phagocytes to typical eosinophiles, whose nuclei later became polymorphous, was observed. These cells originated locally and not from bone-marrow elements.

Disturbances in the Hydrochloric Secretion in Diseases of, and following Extirpation of the Gall-bladder.—H. Hohlweg (*Deutsch. f. klin. Med.*, 1912, cviii, 255) reports gastric analyses from a large number of patients with disease of, or following extirpation of the gall-bladder. He found after extirpation of the gall-bladder that of 39 patients only 10 per cent. had normal hydrochloric acid following a test breakfast. The remainder (74.3 per cent.) had either subnormal values or an actual deficit of hydrochloric acid. Three cases with normal acid were not included in the series; two suffered from gastric ulcer, the third had icterus, conditions frequently associated with hyperacidity. Hohlweg believes that a more careful analysis would have resulted in the diagnosis of similar complications in some of the other cases with normal hydrochloric acid. Among 43 patients with closure of the cystic duct or atrophy of the gall-bladder, 84 per cent. exhibited a hydrochloric acid deficit, 6 patients had subacidity, and only once was the hydrochloric acid normal in quantity. The conditions here are, therefore, analogous to those following extirpation of the gall-bladder, and the gastric findings are the same. In a series of 15 cases of cholecystitis, some with calculi but without closure of the cystic duct, hydrochloric acid deficit was found 13 times, and in the remainder there was subacidity. Hohlweg next examined the gastric contents of dogs before and after cholecystectomy, and the results were similar to those encountered in man. In a young married woman the gastric contents during an attack of gallstone colic showed a hydrochloric acid deficit of 20, total acidity of 32. Two stones were recovered from the stools. A week later free hydrochloric acid 38, total acidity 74 Finally, Hohlweg cites several histories of elderly patients with loss of weight, gastric symptoms, and hydrochloric acid deficit, in whom a diagnosis of gastric cancer was made. Operation showed nothing in the stomach, but there was marked disease of the gall-bladder.

Calcium Metastases and Calcium Gout.—M. B. SCHMIDT (*Deutsch. med. Woch.*, 1913, xxxix, 59) has made a careful study of a case presenting extensive calcification and has arrived at the following conclusions: An excess of calcium in the blood alone can lead to deposition of calcium in healthy organs, as shown in Tanaka's experiments and in many cases of calcium metastases in skeletal diseases of man without nephritis. This, however, is uncommon in man, for usually there exists a nephritis. On the other hand, extensive calcification may occur in some parts of the body, without increase of the calcium contained in the blood, through resorption from the bone; in such cases there is usually, but not always, a nephritis. In these cases the author believes that there is not a primary dystrophy but rather an altered (lowered) solubility of clacium in the blood. The usual participation of the acid-secreting organs in the calcification can occasionally be augmented by pathological changes in the tissues. In the pathologically predisposed organs—lungs, gastric mucosa, kidneys, bloodvessels and possibly the myocardium—calcification, can occur without preceding pathological changes, as happened repeatedly in Schmidt's case. When necrosis is found after dissolving the calcium, Schmidt believes it is to be interpreted as the result of the deposition calcium, not the cause. Such a conception is similar to the prevailing theory regarding gout, namely, that gouty deposits result from a primary disturbance of uric acid metabolism with precipitation of salts in healthy tissues and secondary necrosis. Therefore, the name calcium gout is appropriate for the condition described.

A Method of Differentiating between Ascites and Fluids from Ovarian Cysts.—A. DIENST (*Münch. med. Woch.*, 1912, lix, 2731) alludes to the importance of differentiating at times between ascites and a flaccid ovarian cyst, if exploratory operation is refused and one has to resort to tapping of the abdomen. The appearance of the fluid may not be characteristic, for at times the fluid of the cyst closely resembles the usual serous ascitic fluid and, on the other hand, a pseudochylous or chylous ascitic fluid is not unlike many fluids obtained from cysts. Dienst has found that fibrin is a constant constituent of ascitic fluids, while it is absent in the fluids of ovarian cysts. As a